UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to:
OSB1997-0830

September 04, 1997

Jim Furnish
U.S. Forest Service
Siuslaw National Forest
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Corvallis, Oregon 97339

Van Manning
Bureau of Land Management
Salem District Office
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Eugene, Oregon 97440-2226

RE: Conference Opinion for Proposed Actions in the U.S. Forest Service - Siuslaw National Forest, Bureau of Land Management (BLM) - Salem District, and BLM - Eugene District, that May Affect Oregon Coast Steelhead in the Oregon Coast Range Province

Dear Mr. Furnish, Mr. Manning, and Ms. Nelson:

Attached is the National Marine Fisheries Service's (NMFS) Endangered Species Act (ESA) section 7 conference opinion (Opinion) for the proposed Schooner Sails Timber Sale, Drift Home Thin, Deadwood/Taylor Thin, and North Fork Siuslaw River Bridge Replacement in the Siuslaw National Forest, proposed Borderline Bear Timber Sale in the Salem District Bureau of Land Management (BLM), and Clay Creek Campground retaining wall repair and Lower Lake Creek Recreation Management Plan in the Eugene District BLM. These actions have been determined by the U.S. Forest Service (USFS) and BLM as "likely to adversely affect" and not likely to jeopardize the

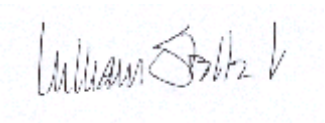
continued existence or result in the destruction or adverse modification of proposed critical habitat of Oregon Coast steelhead (*Oncorhynchus mykiss*) and Oregon Coast coho salmon (*O. kisutch*). The effects determination was made by evaluating the environmental baseline (current aquatic habitat conditions) and predicting effects of actions on that baseline (see enclosed Opinion).

Although the NMFS expects some adverse effects to the environmental baseline from these actions, the effects are expected to be minor because of project design and project timing. Additionally, mitigation in the form of road decommissioning, down wood creation, and riparian planting for future large woody debris will beneficially affect elements of the environmental baseline.

Should Oregon Coast steelhead become listed under the ESA, or should critical habitat be designated, the NMFS expects the attached Opinion to serve as the basis for a biological opinion on implementation of the action, pursuant to 50 CFR § 402.10(d). Since the ESA does not have a prohibition against take of proposed or candidate species, an Incidental Take Statement is not issued with the attached Opinion.

If you have any specific questions, please contact Steve Morris at (503) 231-2224 or Garwin Yip at (503) 230-5419.

Sincerely,



William Stelle, Jr.
Regional Administrator

Enclosures

Endangered Species Act - Section 7 Conference

CONFERENCE OPINION

C Schooner Sails Timber Sale
C Drift Home Thin
C Deadwood/Taylor Thin
C North Fork Siuslaw River Bridge Replacement
C Borderline Bear Timber Sale
C Clay Creek Campground Retaining Wall Repair
C Lower Lake Creek Recreation Management Plan

Agencies: U.S. Forest Service, Siuslaw National Forest
Bureau of Land Management, Salem District
Bureau of Land Management, Eugene District

Conference
Conducted By: National Marine Fisheries Service
Northwest Region

Date Issued: September 4, 1997

Refer to: OSB1997-0830

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I. Introduction and Background

The objective of this conference is to determine whether the following proposed actions are likely to jeopardize the continued existence of Oregon Coast (OC) steelhead or result in the destruction or adverse modification of critical habitat.

U.S. Forest Service (USFS), Siuslaw National Forest (NF):
- Schooner Sails Timber Sale
- Drift Home Thin
- Deadwood/Taylor Thin
- North Fork Siuslaw River Bridge Replacement

Bureau of Land Management (BLM), Salem District:
- Borderline Bear Timber Sale

BLM, Eugene District:
- Clay Creek Campground Retaining Wall Repair
- Lower Lake Creek Recreation Management Plan

Descriptions of the proposed actions are provided in Section II of this document.

The OC steelhead (*Oncorhynchus mykiss*) Evolutionarily Significant Unit (ESU)[1] was proposed as threatened under the Endangered Species Act (ESA) by the National Marine Fisheries Service (NMFS) (August 9, 1996, 61 FR 41541). The NMFS issued a six-month extension for a final listing determination for OC steelhead based on substantial scientific disagreement regarding the sufficiency and accuracy of data relevant to listing this ESU (August 18, 1997, 62 FR 43974).

The OC coho salmon ESU (*Oncorhynchus kisutch*) was proposed to be listed as threatened under the ESA by the NMFS (July 25, 1995, 60 FR 38011). Subsequent consideration of Federal and state conservation measures have resulted in a determination that a threatened listing of the ESU is not now warranted (May 6, 1997, 62 FR 24588). The OC coho salmon are currently considered to

1. For purposes of conservation under the Endangered Species Act, an Evolutionarily Significant Unit is a distinct population segment that is substantially reproductively isolated from other conspecific population units and represents an important component in the evolutionary legacy of the species (Waples 1991).

be candidates for ESA listing. This determination is subject to review within three years. The NMFS is no longer conferencing on candidate species, and therefore, will no longer conference on potential effects of projects on OC coho salmon.

The proposed actions have been determined as "likely to adversely affect" and not likely to jeopardize the continued existence or result in the destruction or adverse modification of proposed critical habitat of OC steelhead. The NMFS expects these actions to adversely affect the environmental baseline. However, project design, timing, and expected mitigation reduce these effects substantially enough to avoid jeopardizing the continued existence of OC steelhead. Mitigation includes actions that will improve the environmental baseline in addition to reducing potential adverse affects of the actions. Because critical habitat has not been proposed or designated, this conference does not address destruction or adverse modification of critical habitat. Should OC steelhead be listed under the ESA, or should critical habitat be designated, the NMFS expects this Conference Opinion (Opinion) to serve as the basis for a biological opinion on implementation of this action, pursuant to 50 CFR § 402.10(d).

On June 20, 1997, the NMFS received a letter and biological assessments (BA) from the USFS, Siuslaw NF, requesting conference regarding the potential effects of Schooner Sails Timber Sale,
Drift Home Thin, Deadwood/Taylor Thin, and North Fork Siuslaw River Bridge Replacement on OC steelhead and OC coho salmon (USDA-FS 1997b). On July 7, 1997, the NMFS received a memorandum and BA from the BLM, Salem District, requesting conference regarding the potential effects of Borderline Bear Timber Sale on OC steelhead and OC coho salmon (USDI-BLM 1997a). On July 23, 1997, the NMFS received a letter and BA from the BLM, Eugene District, requesting conference regarding the potential effects of Clay Creek Campground Retaining Wall Repair and Lower Lake Creek Recreation Management Plan on OC steelhead and OC coho salmon (USDI-BLM 1997b).

This Opinion has been completed pursuant to the ESA and its implementing regulations (50 CFR § 402), and constitutes formal conference for OC steelhead, proposed for listing under the ESA. Formal conferencing on these proposed actions is concluded with the issuance of this Opinion.

The NMFS, in collaboration with other Federal agencies[2], has prepared guidance for determining the effects of human activities on anadromous fish species of concern (NMFS 1996). This guidance is based on a "Matrix of Pathways and Indicators" (Matrix), which is a simple yet holistic method of characterizing environmental baseline conditions and predicting the effects of human activities on those baseline conditions. The Matrix provides generalized ranges of functional values (i.e., properly functioning, at risk, and not properly functioning) for aquatic, riparian, and watershed parameters.

The NMFS acknowledges that the generalized values provided in the Matrix may not be appropriate for all watersheds within the range of anadromous salmonids. Development of more biologically appropriate matrices in specific physiographic areas is encouraged. The NMFS, in conjunction with the Oregon Department of Fish and Wildlife (ODFW) and Federal land management agencies, is in the process of appropriately modifying the Matrix for the Oregon Coast Range Province (this includes the proposed project area). For the purpose of this conference, the existing Oregon Coast Range Province interim Matrix (dated June 14, 1996) was used to analyze the proposed actions. This interim Matrix is included in Attachment 1 of this Opinion.

II. Proposed Actions

1. Schooner Sails Timber Sale: As part of the Density Management Study: Riparian Buffer Component (Aquatic Habitats and Vertebrate Diversity) (Olson *et al.* 1997), the USFS proposes 145 acres of commercial thin and 423 acres of precommercial thin in Upper Drift Creek, North Creek, and South Fork Schooner Creek (Siletz/Yaquina Section 7 Watershed). One-end suspension of all material will be required; however, full suspension will occur where possible. Riparian vegetation leave areas along all
streams range from 25-120 feet. The purpose for the proposed action is to investigate the response of aquatic

2. The other collaborating Federal agencies are the U. S. Forest Service, the Bureau of Land Management, and the U. S. Fish and Wildlife Service.

habitat features to alternative widths of riparian no-entry zones with upslope thinning regimes (Olson *et al.* 1997). One and four-tenths miles of semi-permanent road will be constructed/reconstructed.

2. Drift Home Thin: The USFS proposes to thin approximately 1930 acres in the Drift Creek and Big Elk watersheds (Alsea and Siletz/Yaquina Section 7 Watersheds) utilizing skyline yarding. Variable width buffers would be retained along all stream channels and headwalls and will be governed by slope and vegetation conditions. Approximately five miles of temporary spur roads, primarily on ridgetops, will be constructed that include two temporary culvert placements.

   In addition, the USFS proposes to:
   - Decommission approximately 13 miles of ridgetop roads and associated spurs;
   - Place approximately 300 trees via helicopter in about 1.2 miles of lower Gopher Creek and about 1.6 miles of upper Drift Creek;
   - Plant vegetation in approximately 30 acres of riparian meadows (1.6 miles) along Drift and Gopher Creeks to provide a future large woody debris source as well as shade in the long term for these streams;

3. Deadwood/Taylor Thin: The USFS is using a landscape perspective to propose thinning approximately 70 units of 20 to 45 year old plantations within the Indian/Deadwood Watershed (Siuslaw Section 7 Watershed). The landscape perspective is used in the analysis to develop the thinning scenarios in order to better meet the needs of the late-successional species that are to benefit from these thinnings. The majority of the thinning will be one end suspension cable logging with full suspension when streams are crossed. Helicopter logging is considered for a number of units.

   In addition, the USFS proposes to:
   C Increase large woody debris, improve pool area, improve off-channel habitat in refugia and high priority restoration areas;

- C Replant some areas with conifers to improve stream influence zone;

- C Water-bar and block old spur roads that are reopened for the project.

4. North Fork Siuslaw River Bridge Replacement: The North Fork Siuslaw River bridge (Siuslaw Section 7 Watershed) was damaged during the flood of 1996. The USFS proposes to replace the bridge that provides access to Bonneville Power Administration personnel and other interested parties. The bridge completely spans the North Fork Siuslaw River, and there will be no in-water work.

5. Borderline Bear Timber Sale: The BLM proposes an estimated 2.6 million board feet, 246-acre density management commercial thin in the Nestucca River watershed (Nestucca Section 7 Watershed). Fifty-foot no-cut buffer would be maintained on intermittent streams, and 100-foot no-cut buffers would be maintained on perennial streams. The Nestucca River Watershed Analysis (USDA-FS *et al.* 1994) allows for site-specific silvicultural treatments within late-successional forests to hasten the development of older forest characteristics and uneven-aged stands. Treatment within the Riparian Reserves will not retard attainment of the Aquatic Conservation Strategy objectives. Riparian Reserves outside of the no-cut buffers to the upland boundaries of the units would receive variable prescription thinnings ranging from no treatment to a residual density of 40 trees per acre (USDI-BLM 1997a). Within Riparian Reserves, cable yarding would be used, except within the second site potential tree distance in Units A and B, where the northern tip of each unit slopes away from the stream and could allow ground based yarding. One-half mile of road would be constructed, mainly on the ridge between Bear and Elk Creeks, for the timber harvest.

   Clay Creek Campground Retaining Wall Repair: The BLM proposes to replace a retaining wall (Siuslaw Section 7 Watershed) that was damaged by heavy rains. The concrete supporting structure provides a seasonal swimming area and contains a fish ladder.

7. Lower Lake Creek Recreation Management Plan: Lake Creek

Falls (Siuslaw Section 7 Watershed) is heavily used by recreationists. The BLM acquired a larger parking area to provide safe parking. However, recreationists must walk along Highway 36 to access a stairway to the Falls. The Oregon Department of Transportation recently filled the parking lot with landslide materials. In order to discourage recreationists parking and walking along Highway 36, the BLM proposes to maintain the landslide material at the parking area. In addition, many recreationists slide down the slope from the road to access the falls area, contributing to loss of vegetation and increased erosion. The BLM proposes the Lower Lake Creek Recreation Management Plan (the Plan) to reduce safety hazards and human impacts at Lake Creek Falls. The Plan includes creation of a day use area with parking lots, sanitary facilities, a footbridge over Lake Creek, and hiking trails.

The USFS and BLM have incorporated several project design features in the proposed actions that substantially reduce adverse effects to anadromous fish. These features include:

1. Schooner Sails Timber Sale:
   - C Restricting operations to dry weather (generally May 1 through October 31).
   - C Decommissioning approximately 3.6 miles of roads, which includes the 1.4 miles of semi-permanent road constructed/reconstructed.
   - C An implementation and effectiveness monitoring plan.

2. Drift Home Thin:
   - C Constructing, using, and obliterating temporary roads, located primarily on ridgetops, during the dry season of the same year.
   - C Placing approximately 10 drainage dips over road stream crossings to prevent water traveling long distances to ditch relief culverts in the event that the culvert becomes plugged.
   - C Reopening, utilizing, water barring, and closing approximately 10 miles of previously closed and not water barred road.

- C Restoring and enhancing stream channel complexity and fish habitat quality in Drift Creek, a key watershed.

3. Deadwood/Taylor Thin:
   - C Stopping harvest operations during periods of intense rain when damage to roads and potential effects to streams increase.
   - C Conducting fish and wildlife improvements as part of this project and designated in the KV plan.
   - C Water-barring and blocking old spur roads that are reopened for the project.
   - C Replanting some areas with conifers to improve stream influence zone.

4. North Fork Siuslaw River Bridge Replacement:
   - C No in-water work.
   - C Requiring a spill control kit during construction.

5. Borderline Bear Timber Sale:
   - C Limiting yarding and hauling to the dry season.
   - C Although trees would be removed from the Riparian Reserves, the no-cut buffers and effects of the thinning should accelerate growth of the remaining trees for future large woody debris input.
   - C Subsoiling the one-half mile of road constructed for the timber sale, in addition to removing approximately two miles of old tractor haul roads.

6. Clay Creek Campground Retaining Wall Repair:
   - C Dewatering the site during the repair work.
   - C Complying with ODFW’s preferred in-water work window of July 1 through September 15.

7. Lower Lake Creek Recreation Management Plan:
   - C Creating the hiking trails. This would reduce human effects to the slope from Highway 36.
   - C Removing trees along trails only if they are

considered to create a hazard.

- C Utilizing existing roads, trails, parking areas, and recent fish project access to create the hiking trails.

- C Placing hay bales at the parking lot to prevent erosion of the landslide materials into Lake Creek.

Full project details are available in USDA-FS (1997a and 1997b) and USDI-BLM (1997a and 1997b)

.II. Biological Information and Critical Habitat

The listing status and biological information for OC steelhead are described in Attachment 1. While critical habitat has not been proposed or designated, Attachment 1 describes potential critical habitat elements for OC steelhead.

IV. Evaluating the Proposed Actions

The standards for determining jeopardy are set forth in Section 7(a)(2) of the ESA, and defined in the implementing regulations (50 CFR § 402). Attachment 2 describes how the NMFS applies the ESA jeopardy standards. The OC steelhead is not currently listed and therefore there is no designated critical habitat. If critical habitat is proposed or designated, consultation would be reinitiated to determine if there will be destruction or adverse modification of critical habitat.

As described in Attachment 2, the first steps in applying the ESA jeopardy standards are to define the species' biological requirements and to describe the species' current status as reflected by the environmental baseline. In the next steps, the NMFS' jeopardy analysis considers how proposed actions are expected to directly and indirectly affect specific environmental factors that define properly functioning aquatic habitat essential for the survival and recovery of the species. This analysis is set within the dual context of the species' biological requirements and the existing conditions under the environmental baseline (defined in Attachment 1). The analysis takes into consideration the overall balance of beneficial and detrimental activities taking place within the action area.

If the NMFS finds that the Federal actions are likely to jeopardize the listed species then the NMFS must identify any reasonable and prudent alternatives to the proposed action.

A. Biological Requirements. For this conference, the NMFS finds that the biological requirements of OC steelhead are best expressed in terms of environmental factors that define properly functioning freshwater aquatic habitat necessary for survival and recovery of the species. Individual environmental factors include water quality, habitat access, physical habitat elements, channel condition, and hydrology. Properly functioning watersheds, in which all of the individual factors operate together to provide healthy aquatic ecosystems, are also necessary for the survival and recovery of OC steelhead. This information is summarized in Attachment 1.

B. Environmental Baseline.

1. Current range-wide status of the species under the environmental baseline. The OC steelhead ESU is not presently in danger of extinction. The NMFS is now considering whether it is likely to become endangered in the foreseeable future (Busby *et al.* 1996). In the absence of adequate population data, habitat condition provides a means of evaluating the status of these species for the environmental baseline assessment.

2. Action Area. The “action area” is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR § 402.02). Thus, the "action area" for this conference includes areas downstream of the project area as well as the immediate project area itself.

3. Current status of the species under the environmental baseline within the action area. Environmental baseline conditions within the action area were evaluated at the site and basin scale. This evaluation was based on the Oregon Coast

Province Interim Matrix (see Attachment 1). This method assesses the current condition of instream, riparian, and watershed factors that collectively provide properly functioning aquatic habitat essential for the survival and recovery of the species.

The environmental baseline within the Nestucca and Siuslaw Section 7 Watersheds are divided relatively evenly between “properly functioning,” “at risk,” and “not properly functioning” for the indicators considered (USDA-FS 1997b, USDI-BLM 1997a, USDI-BLM 1997b).

The Siletz/Yaquina Section 7 Watershed is “at risk” or “not properly functioning” for the majority of the environmental conditions considered. The majority of the section 7 watershed is “not properly functioning” (USDA-FS 1997b).

The Alsea Section 7 Watershed is “at risk” and “not properly functioning,” with the majority of the section 7 watershed “at risk” for the aquatic, riparian, and watershed parameters presented in the matrix
(USDI-BLM 1997b).

Based on the best information available on the current status of the species (Attachment 1) and the NMFS' assumptions given the information available regarding (1) population status, population trends, and genetics (page 3 of Attachment 2) and (2) the environmental baseline conditions within the action areas, the NMFS concludes that the biological requirements of OC steelhead are currently not being met under the environmental baseline within the action areas. Significant improvement in habitat conditions is needed to meet the biological requirements for survival and recovery of these species. Actions that do not maintain or restore properly functioning aquatic habitat conditions would be likely to jeopardize the continued existence of OC steelhead due to the high level of risk the species presently face under the degraded environmental baseline.

V. Analysis of Effects

A. Effects of Proposed Actions. The effects determinations for the proposed projects were made using NMFS (1996) to evaluate the environmental baseline (current aquatic conditions) and to predict any effects of the actions on that baseline. The effects of the actions are expressed in terms of the expected effect (restore, maintain, or degrade) on each of the aquatic habitat factors in the project areas, as described in the "Checklist for documenting environmental baseline and effects of the action" (Checklist) completed for each action (USDA-FS 1997b, USDI-BLM 1997a and 1997b). The results of the Checklists for these actions provide a basis for determining the overall effects on the environmental baseline in the project areas.

Some short-term degradation in sediment, turbidity, streambank condition, and road density may occur as a result of implementing the proposed projects. In the long term, the proposed actions are expected to maintain, or move toward restoration, all habitat indicators in the Nestucca, Siletz/Yaquina, Alsea, and Siuslaw Section 7 Watersheds (USDA-FS 1997b, USDI-BLM 1997a and 1997b). The balance of the actions will move habitat toward restoration in areas where habitat is not properly functioning.

Potential adverse effects of the projects and mitigating factors are discussed below.

1. Schooner Sails Timber Sale:
   - The 1.4 miles of road construction/reconstruction for the timber sale would slightly increase road density. However, a total of 3.6 miles of roads would be decommissioned upon completion of the timber sale, reducing road density in the affected watersheds.
   - Timber harvest and hauling may increase turbidity, but adverse effects are minimized by restricting operations to dry weather (generally May 1 through October 31.
   - The timber harvest would reduce the amount of

large woody debris in the short term. However, thinning the riparian area would result in accelerated growth of existing trees that will provide future large woody debris.

- C An implementation and effectiveness monitoring plan would be in place.

2. Drift Home Thin:
   - C Approximately five miles of road spurs, including two temporary culverts, will be constructed for the timber sale, slightly increasing road density. In addition, approximately 10 miles of road would be reopened. However, approximately 13 miles of ridgetop roads and associated spurs, including the removal of approximately eight culverts, will be decommissioned upon completion of the timber sale, resulting in reduced road densities in the affected watersheds. Also, approximately

     10 drainage dips would be placed over road stream crossings to prevent water from traveling long distances to ditch relief culverts in the event that the culverts become plugged.

   - C Temporary roads would be constructed, used, and decommissioned during the dry season of the same year to reduce the potential of sediment entering the stream. In addition, the 10 miles of road that will be reopened (previously closed and not waterbarred) for the timber sale will be waterbarred prior to usage.

   - C Timber harvest reduces the amount of large woody debris in the short term. However, thinning the riparian area would result in accelerated growth of existing trees that will provide future large woody debris. Although the large woody debris placement and riparian plantings may increase short term turbidity and streambank stability, these stream channel complexity and fish habitat quality enhancement measures would also assist in the restoration of large woody debris and shade in the long term.

3. Deadwood/Taylor Thin:

- C Road density would be increased slightly by reopening old spur roads. However, they will be waterbarred and blocked again after the timber harvest. Additional roads would be closed, reducing road density in the affected watersheds.

- C Timber harvest and hauling may increase turbidity, but adverse effects are minimized by stopping harvest operations during periods of intense rain when damage to roads and potential effects to streams increase.

- C Timber harvest reduces the amount of large woody debris in the short term. However, thinning the riparian area would result in accelerated growth of existing trees that will provide future large woody debris and shade.

- C Where potential exists in refugia and high priority restoration areas, stream restoration activities will improve pool area, quality and frequency, large woody debris additions will improve off-channel habitat and streambank conditions, and conifer plantings will improve the stream influence zone.

4. North Fork Siuslaw River Bridge Replacement:

- C Ground disturbance may result in a short term increase in sediment production, but the project will not require in-water work. In addition, there will not be any piers in the stream channel.

- C Although no short or long term degradation of chemical contaminants is expected, a spill control kit will be required during construction.

5. Borderline Bear Timber Sale:

- C Potential adverse effects to soil and water quality are minimized by restricting harvest and hauling operations to the dry season, and road maintenance before, during and after hauling.

- C Although an estimated one-half mile of new natural or rocked road will be constructed, it will be subsoiled upon completion of the timber sale. In addition, approximately two miles of old tractor haul roads will be removed during the implementation of the timber sale, resulting in an overall reduction in road density in the affected watersheds.
- C Timber harvest reduces the amount of large woody debris in the short term. However, thinning the riparian area would result in accelerated growth of existing trees that will provide future large woody debris and shade in the long term.

6. Clay Creek Campground Retaining Wall Repair:
   - C The repair work may result in a short term increase in sediment. However, the potential sediment increase is minimized by dewatering the site during the repair work. Repairing the damaged retaining wall would reduce the amount of sediment entering the stream.

   - C Potential adverse effects to anadromous salmonids will be minimized by complying with ODFW's preferred in-water work window of July 1 through September 15.

7. Lower Lake Creek Recreation Management Plan:
   - C Short term increases in sediment may result from construction of the foot bridge, parking lots, and associated facilities. However, the project would increase safety and reduce human effects to the slope from Highway 36, which includes creation of trails and devegetating the slope in several areas.

   - C Potential adverse effects from creation of the hiking trails are minimized by utilizing existing roads, trails, parking areas, and recent fish project access. In addition, only trees considered a hazard along the hiking trails would be removed.

   - C The landslide material in the current parking lot may be a source of sediment in Lake Creek.

Hay bales would be placed at the parking lot to prevent erosion of the landslide materials into Lake Creek.Cumulative Effects. "Cumulative effects" are defined as those effects of "future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (50 CFR § 402.02).

Significant improvement in the reproductive success of
OC steelhead is unlikely without changes in agricultural, forestry, and other practices affecting riparian areas. The NMFS is not aware of any future changes to existing State and private activities within the action area that would cause greater impacts to these species than presently occur.

VI. Conclusion

The Schooner Sails Timber Sale, Drift Home Thin, Deadwood/Taylor Thin, and North Fork Siuslaw River Bridge Replacement, as described in USDA-FS (1997a and 1997b), Borderline Bear Timber Sale, as described in USDI-BLM (1997a), and Clay Creek Campground Retaining Wall Repair and Lower Lake Creek Recreation Management Plan, as described in USDI-BLM (1997b), are not likely to jeopardize the continued existence of OC steelhead. The NMFS used the best available scientific and commercial data to apply its jeopardy analysis (Attachment 2) when analyzing the effects, including cumulative effects, of the proposed actions on the biological requirements of the species relative to the environmental baseline.

In reaching this conclusion, the NMFS has determined that the likelihood of survival and recovery of OC steelhead can be increased by providing sufficient prespawning survival, egg-to-smolt survival, and upstream/downstream migration survival rates through the protection of and restoration to properly functioning freshwater habitat within the Nestucca, Siletz/Yaquina, Alsea, and Siuslaw Section 7 Watersheds.

The USFS and BLM applied the NMFS' evaluation methodology (NMFS 1996) to the proposed actions and found that the

proposed actions would maintain most of the essential habitat elements, with minor, short-term degradation of some essential habitat elements, like sediment, road density, and riparian areas. The actions would move other habitat indicators, like road density, towards restoration. Project design features, such as compliance with ODFW's preferred in-water work window, road decommissioning, dry weather harvest and hauling, and no-cut riparian buffers substantially diminish short-term adverse effects to anadromous salmonids.

Because they are balanced by habitat improvements, adverse habitat effects from the proposed actions would not reduce prespawning survival, egg-to-smolt survival, or upstream/ downstream migration survival rates to a level that would appreciably diminish the likelihood of survival and recovery of OC steelhead.

VII. Conservation Recommendations

Section 7 (a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed action on listed species, to minimize or avoid adverse modification of critical habitat, or to develop additional information. The NMFS does not have any conservation recommendations to further minimize or avoid adverse effects of the proposed actions on OC steelhead.

VIII. Reinitiation of Conference

Reinitiation of this conference is required: (1) if any action is modified in a way that causes an effect on the species that was not previously considered in the BA and in this Opinion; (2) new information or project monitoring reveals effects of the action that may affect the species in a way not previously considered; or (3) a new species is listed or critical habitat is designated that may be affected by the action (50 CFR § 402.16).

For example, the analysis included in this conference has been conducted at the project or site level. Future watershed or basin analyses may indicate that the existing environmental

baseline is substantially different than indicated by this analysis. Reinitiation of this conference would be required for ongoing or continuing activities for which the environmental baseline is substantially different than originally assessed.

IX. References

Section 7(a)(2) of the ESA requires biological and conference opinions to be based on "the best scientific and commercial data available." This section identifies the information used in developing this Opinion in addition to the BAs provided by the USFS and BLM.

Busby, P.J., T.C. Wainwright, G.J. Bryant, L.J. Lierheimer, R.S. Waples, F.W. Waknitz, and I.V. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-NWFSC-27. 261 pages.

National Marine Fisheries Service (NMFS). 1996. Making ESA Determinations of Effect for Individual or Grouped Actions at the Watershed Scale. NMFS, Environmental and Technical Services Division, Habitat Conservation Branch, 525 NE Oregon Street, Portland, Oregon. 28 pages.

Olson, D.H., B. Hansen, L. Ellenburg, and J. Sedell. Study Plan, Density Management Study: Riparian Buffer Component (Aquatic Habitats and Vertebrate Diversity). Pacific Northwest Research Station, USDA Forest Service, Corvallis, Oregon. 16 pages. Appendix A in USDA-FS (1997a).

United States Department of Agriculture - Forest Service (USDA-FS). 1997a. June 11, 1997, letter and enclosed environmental assessment for Schooner Sails Project, from Donald N. Gonzalez, to interested citizens (Available from USDA-FS, Hebo Ranger District, 31525 Highway 22, Hebo, Oregon 97122).

United States Department of Agriculture - Forest Service (USDA-FS). 1997b. June 20, 1997, letter and biological assessments, from James Furnish (USFS), to Elizabeth Holmes Gaar (NMFS), for Schooner Sails Timber Sale, Drift

Home Thin, Deadwood/Taylor Thin, and North Fork Siuslaw River Bridge Replacement, that may affect Oregon Coast steelhead or Oregon Coast coho salmon. Siuslaw National Forest.

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